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The following is a summary of findings from the quarterly vibration survey performed at your facility on 5/2/2022. Please let us know if there are any questions or comments.

QualiTest® uses a four step rating system for defects.

<u>Class I:</u> Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

<u>Class II</u>: Defect (s) present that may cause problem in long term (2-6 months). Repair during normal maintenance scheduling. Continue to monitor.

<u>Class III</u>: Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

<u>Class IV;</u> Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

Defects



CLASS III P8 Oven Fan (Fan Inboard Vertical/Fan Outboard Axial)

Fan data above shows several high amplitude rpm harmonics throughout spectra. This indicates mechanical looseness and wear of the bearings/housings and/or fan shaft. Inspect fan bearings and shaft for looseness and wear soon.



CLASS II Zone 3 Supply Fan (Fan Inboard Horizontal)

High frequency non-synchronous vibration indicates bearing defects are present in the fan bearings. Bearings should be replaced as scheduling allows.



CLASS II Zone 4 Supply Fan (Motor Inboard Vertical)

Motor vibration data is showing signs of bearing defects/wear in the motor bearings. Replace motor as scheduling allows.



CLASS II Zone 5 Supply Fan (Fan Inboard Vertical)

Non-synchronous vibration indicates bearing defects are present in the fan bearings. Bearings should be replaced as scheduling allows.



CLASS II Cooling Fan B (Fan Inboard Vertical)

High frequency non-synchronous vibration indicates bearing defects are present in the fan bearings. Bearings should be replaced as soon as scheduling allows.



CLASS II P19 Oven Fan (Motor Inboard Vertical/Fan Outboard Vertical)

Data shows a high 1 x rpm vibration of the motor and fan in the vertical direction. Fan data (bottom spectrum) shows some non-synchronous peaks that are very close to motor rpm. It is unclear if these are bearing defect frequencies or motor harmonics. Directional vibration may be resonance or a mechanical issue such sheave misalignment or loose structure/fasteners. For now, it is recommended to inspect sheaves for parallel and angular misalignment. Ensure belts and sheaves are not worn.

Database: sonoco.rbm Station: SONOCO

MEASUREMEN	F POINT	OVERALL LEVEL	HFD / VHFD
VACPUMP1	- VACUUM PUM	P1 (02-May-22)
		OVERALL LEVEL	1 - 20 KHz
MOH		.216 In/Sec	.441 G-s
MOV		.165 In/Sec	.482 G-s
MIH		.140 In/Sec	.499 G-s
MIV		.219 In/Sec	.353 G-s
MIA		.309 In/Sec	.324 G-s
EIH		.079 In/Sec	.202 G-s
EIV		.065 In/Sec	.192 G-s
EIA		.035 In/Sec	.147 G-s
EOH		.061 In/Sec	.157 G-s
EOV		.068 In/Sec	.184 G-s
EOA		.042 In/Sec	.419 G-s
VACPUMP2	- VACUUM PUM	P2 (02-May-22)
		OVERALL LEVEL	1 - 20 KHz
MOH		.215 In/Sec	.613 G-s
MOV		.152 In/Sec	1.923 G-s
MIH		.305 In/Sec	.565 G-s
MIV		.176 In/Sec	1.536 G-s
MIA		.092 In/Sec	.522 G-s
EIH		.156 In/Sec	.161 G-S
EIV EIV		.133 IN/Sec	.133 G-S
EIA		129 In/Sec	.151 G-S
EOH		.129 IN/Sec	.108 G-S
EOA		.049 In/Sec	.222 G-s
CTPUMP1	- COOLING TO	WER PUMP 1 (02-May-22)
		OVERALL LEVEL	1 - 20 KHz
MOH		.302 In/Sec	.141 G-s
MOV		.150 In/Sec	.100 G-s
MIH		.127 In/Sec	.142 G-s
MIV		.072 In/Sec	.062 G-s
MIA		.242 In/Sec	.142 G-s
CTPUMP2	- COOLING TO	WER PUMP 2 (02-May-22)
		OVERALL LEVEL	1 - 20 KHz
MOH		.123 In/Sec	.461 G-s
MOV		.118 In/Sec	.779 G-s
MIH		.136 In/Sec	.901 G-s
MIV		.091 In/Sec	.223 G-s
MIA		.130 In/Sec	.305 G-s
P80VENFAN	- P8 OVEN FA	N (02-May-22)
		OVERALL LEVEL	1 - 20 KHz
MOH		.220 In/Sec	.078 G-s
MOV		.196 In/Sec	.083 G-s
MIH		.194 In/Sec	.098 G-s
MIV		.222 In/Sec	.198 G-s
MIA		.158 In/Sec	.043 G-s
EIH		.309 In/Sec	1.427 G-s
EIV		.4/6 In/Sec	./94 G-s
EIA		.618 In/Sec	.542 G-s
EOH		.183 In/Sec	1.203 G-S
EOV		.210 IN/SEC	1.U/1 G-S

EOA						.823	In/Sec		. 579	G-s
MAINXHAUST	_	MAIN	E	KHAUST	FAN			(02-Ma	y-22))
						OVERA	LL LEVEL	. 1	- 20) KHz
MOH						.280	In/Sec		.441	G-s
MOV						.350	In/Sec		.217	G-s
MIH						.335	In/Sec		. 909	G-s
MIV						.254	In/Sec		. 531	G-s
MTA						111	In/Sec		204	G-s
ETU						100			570	C-c
ET11						101	In/Sec		060	6-5
EIV						. 101	In/Sec		. 909	G-S
EOH						.195	In/Sec		.537	G-s
EOV						.134	In/Sec	1	.450	G-s
ZONE1FAN	-	ZONE	1	SUPPLY	f Fai	N		(02-Ma	y-22))
						OVERA	LL LEVEL	, 1	- 20) KHz
EIH						.135	In/Sec		.271	G-s
EIV						.156	In/Sec		.364	G-s
EOH						.115	In/Sec		.245	G-s
EOV						.094	In/Sec		. 328	G-s
EOA						.222	In/Sec		191	G-s
							, 200			•••
ZONE2FAN	-	ZONE	2	SUPPLY	FAI	1		(02-Mag	y-22))
						OVERA	LL LEVEL	. 1	- 20) KHz
MOH						.161	In/Sec		.188	G-s
MOV						.149	In/Sec		.361	G-s
MIH						.191	In/Sec		.214	G-s
MIV						.206	In/Sec		.206	G-s
MIA						.227	In/Sec		.141	G-s
ЕТН						262	Tn/Sec		057	G-s
 FTV						131	In/Sec		062	G-8
EIN						. 1.01	In/Sec		041	0 0
LIA						.225	In/Sec		.041	G-S
ZONE3FAN	_	ZONE	3	SUPPLY	FAI	4		(02-May	v-22)
			-			OVERA	I.T. T.EVET	. 1	- 20) KH2
MOH						406		· 1	120	
MOH						.490	In/Sec		.439	G-S
MOV						.207	In/Sec		. 295	G-S
MIH						.141	In/Sec		.289	G-s
MIV						.202	In/Sec		. 390	G-s
MIA						.530	In/Sec		.183	G-s
EIH						.188	In/Sec	1	. 647	G-s
EIV						.110	In/Sec	2	.249	G-s
EIA						.280	In/Sec	2	.173	G-s
EOH						.192	In/Sec		. 389	G-s
EOV						.113	In/Sec		.113	G-s
							, 200		0	•••
ZONE4FAN	-	ZONE	4	SUPPLY	f Fai	1		(02-Mag	y-22))
						OVERA	LL LEVEL	, 1	- 20) KHz
MOH						.264	In/Sec		. 327	G-s
MOV						.271	In/Sec		.230	G-s
MIH						.222	In/Sec		.738	G-s
MIV						.373	In/Sec		. 434	G-s
MIA						.233	In/Sec		. 435	G-s
 ЕТН						303	In/Sec		259	G-9
511 5717						. 505	In/900		320	G-6
EIV						.091	In/Sec		. 520	G-5
EIA						. 358	In/Sec		. 398	G-S
EOH						.142	In/Sec		.167	G-s
EOV						.181	In/Sec		.178	G-s
ZONE5FAN	_	ZONE	5	SUPPLY	FAI	4		(02-May	v-22)
			-			OVERA	LL LEVEL	1	- 20) KHz
мон						.155	In/Sec	-	.077	G-s
MOV						,112	In/Sec		124	G-s
мтч						152	In/900		165	G-6
MIN						1102	TE /0		. 100	G S
MIV						.115	IN/Sec		1003	G-S
MIA						.119	in/Sec		. 123	G-S
EIH						.115	In/Sec	1	.142	G-s
EIV						.074	In/Sec	1	.773	G-s
EIA						.193	In/Sec		. 389	G-s

ZONE6FAN	-	ZONE	6	SUPPLY	FAN		(02-May-	22)	
					OVERA	LL LEVEI	. 1-	20	KHz
MOH					232	Tn/Sec	0	73 G	
MON					450			75 0	
MOV					.452	In/Sec	.0	/5 G	-5
MIH					.206	In/Sec	.0	41 G	i-s
MIV					.348	In/Sec	.0	56 G	-s
MIA					.200	In/Sec	.0	39 G	-s
F TH					189	Tn/Sec	2	13 0	
511					.105	In/Sec	. 2	10 0	
EIV					.215	In/Sec		OT G	-s
EIA					.242	In/Sec	.1	80 G	-s
EOH					.236	In/Sec	. 2	43 G	-s
EOV					237	Tn/Sec	0	16 G	
201						111, 500		-00	
COOLFAN B	-	COOLI	ING	FAN B			(02-May-	22)	
					OVERA	LL LEVEI	. 1-	20	KHz
MOH					.150	In/Sec	. 8	74 G	-s
MOV					216	Tn/Sec	a	12 0	
MOV					.210	III/ Sec		12 G	
MIH					.158	In/Sec	. /	93 G	-s
MIV					.208	In/Sec	. 8	64 G	-s
MIA					.213	In/Sec	.3	01 G	-s
ЕТН					219	Tn/Sec	14	32 G	- e
					.210		1.1	70 0	
ETA					. 223	In/Sec	. 0	70 G	-5
EIA					.267	In/Sec	. 8	16 G	-s
EOH					.200	In/Sec	.3	39 G	-s
EOV					.222	In/Sec	.3	00 G	-s
FOA					226		2	60 0	
LOA					.220	III/ Sec	. 2	00 G	-3
EXHAUSTFAN	-	EXHAU	JST	FAN			(02-May-	22)	
					OVERA	LL LEVEL	. 1-	20	KHz
MOH					.364	In/Sec	. 0	84 G	-s
MOV					264	Tn/Soc		17 0	
MOV					.204			I/ G	-5
MIH					.370	In/Sec	.1	56 G	-s
MIV					.358	In/Sec	.1	35 G	-s
МТА					.229	In/Sec	.0	63 G	-s
- HIA									
MIA									
COOLENN A		COOT 1	- 110				(02 Mars	221	
COOLFAN A	-	COOLI	ING	FAN A			(02-May-	22)	
COOLFAN A	-	COOLI	ING	FAN A	OVERA	LL LEVEI	(02-May-	22) 20	KHz
COOLFAN A MOH	-	COOLI	ING	FAN A	OVERA: .129	LL LEVEI In/Sec	(02-May- 1 - .1	22) 20 62 G	KHz -s
COOLFAN A MOH MOV	-	COOLI	ING	FAN A	OVERA .129 .287	LL LEVEI In/Sec In/Sec	(02-May- - 1 - .1 .3	22) 20 62 G 71 G	KHz -s
COOLFAN A MOH MOV	-	COOLI	ING	FAN A	OVERA .129 .287 116	LL LEVEI In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3	22) 20 62 G 71 G	KHz -s -s
COOLFAN A MOH MOV MIH	-	COOLI	ING	FAN A	OVERA .129 .287 .116	LL LEVEI In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1	22) 20 62 G 71 G 46 G	KHz -s -s
COOLFAN A MOH MOV MIH MIV	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295	LL LEVEI In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1	22) 20 62 G 71 G 46 G	KHz -s -s -s -s
COOLFAN A MOH MOV MIH MIV MIA	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295 .269	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1	22) 20 62 G 71 G 46 G 07 G	KHz -s -s -s -s
COOLFAN A MOH MOV MIH MIV MIA EIH	-	COOLI	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 07 G 57 G 16 G	KHz -s -s -s -s
COOLFAN A MOH MOV MIH MIV MIA EIH EIY	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 07 G 57 G 16 G 83 G	KHz s s s s s
COOLFAN A MOH MOV MIH MIV MIA EIH EIV FIA	-	COOFI	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 07 G 57 G 16 G 83 G	KHZ -s -s -s -s
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOV	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 57 G 57 G 83 G 57 G	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 57 G 16 G 83 G 57 G 37 G	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOH	-	COOF1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 57 G 57 G 57 G 37 G 97 G	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA	-	COOLI	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .0	22) 20 62 G 71 G 46 G 57 G 57 G 37 G 97 G 48 G	KHS SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA	-	COOLI	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 20 62 G 71 G 46 G 57 G 57 G 83 G 57 G 37 G 97 G 48 G	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA	-	COOLI	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 20 62 G 71 G 71 G 71 G 71 G 83 G 57 G 83 G 97 G 48 G 22) 20 20 20 20 20 20 20 20 20 20	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN	-	C00L1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .0 (02-May-	22) 20 62 62 62 67 6 6 71 6 6 7 6 7 6 83 6 57 6 37 6 97 6 48 6 22) 20 20 20 20 20 20 20 20 20 20	KHZ SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOY EOA P190VENFAN	-	COOL1 P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .0 .0 .02-May- 1 -	22) 20 62 G 71 G 46 G 57 G 57 G 57 G 57 G 37 G 97 G 48 G 22) 20	KHz s s s s s s s s s
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH	-	COOL1	ING	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 20 62 62 62 62 63 64 65 76 63 57 63 57 63 57 63 57 64 57 64 57 64 57 64 57 65 57 57 65 57 57 57 57 57 57 57 57 57 5	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOA P190VENFAN MOH MOV	-	COOL] P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEI In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 7	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOY EOA P190VENFAN MOH MOV	-	COOL] P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEI In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 71 G 57 G 83 G 57 G 83 G 97 G 48 G 22) 30 G 78 G 78 G	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH	-	COOL1	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEI In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 20 62 62 62 62 62 63 63 64 65 76 63 65 76 63 77 63 76 63 77 63 76 63 77 63 76 63 77 64 77 76 76 77 76 77 77 76 77 77	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV	-	COOL] P 19	ov	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 46 G 57 G 57 G 57 G 57 G 57 G 37 G 48 G 57 G 37 G 48 G 57 G 5	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH	-	COOL1	ov	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 46 G 57 G 5	KHz S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOA P190VENFAN MOH MOV MIH MIV EOH EOV	_	COOL] P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 7	KHz S S S S S S S KHz S S S S KHz S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOY EOA	_	COOL] P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 57 G 5	KHzs
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MIH MIV EOH EOV EOA	-	C0011	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - .1 .3 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 220 62 G 71 G 57	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOY EOA	_	COOL1	OV	FAN A	OVERAL .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERAL .275 .178 .295 .555 .168 .473 .137	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	22) 62 G 71 G 62 G 71 G 57 G 5	KHZ S S S S S S S KHZ S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOV EOA	-	COOLJ P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	22) 62 G 71 G 62 G 71 G 57 G 5	KHZ S S S S S S S KHZ S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOV EOA	-	COOLJ P 19 502 s	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 .1 .1 .1 .1 .1 .1 .1 .1 .1	22) 62 G 71 G 46 G 57 G 5	KHZZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOV EOA P190VENFAN MOH MOV EOA 502SPNBLWR MOH	-	COOLJ P 19	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 57 G 5	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MOV EOA 502SPNBLWR MOH MOY	-	COOLJ P 19 502 S	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 57 G 5	KHS
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOA P190VENFAN MOH MOV MIH MIV EOA 502SPNBLWR MOH MOV MIV	-	COOLJ P 19 502 s	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .107 .127	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 62 G 71 G 72 G 72 G 72 G 73 G 73 G 73 G 73 G 73 G 74 S 71 G 75 G 7	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOV EOA 502SPNBLWR MOH MOV MIV	-	COOLJ P 19 502 S	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	22) 62 G 71 G 62 G 71 G 57 G 5	KHZ S S S S S S S KHZ S S KHZ S S S KHZ S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV EOA 502SPNBLWR MOH MOV MIV	-	COOLJ P 19 502 s	OV	FAN A	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1	22) 62 G 71 G 46 G 57 G 5	KHZ KHZ S S S S S KHZ S S S KHZ S S S S S S S S S S S S S
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOA 502SPNBLWR MOH MOV MIV	-	COOLJ P 19 502 S C LIN	OV OV	FAN A EN FAN NCER B:	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137 R BLOWER	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 7	KHS
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOV EOA P190VENFAN MOH MOV MIH MIV EOA 502 SPNBLWR MOH MOV MIV CLNESNCBLW	-	COOLJ P 19 502 S C LIN	OV OV	FAN A EN FAN NCER BI	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137 R BLOWER	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 62 G 71 G 57 G 5	KHz
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOA 502SPNBLWR MOH MOV MIV CLNESNCBLW	-	COOLJ P 19 502 S C LIN	OV SPE	FAN A EN FAN NCER BI	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137 R BLOWER OVERA .085	LL LEVEI In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G 62 G 71 G 63 G 71 G 63 G 73 7 G 73 7 G 73 7 G 73 7 G 73 7 G 74 8 2 20 G 74 6 G 73 7 G 74 6 G 73 7 G 74 6 G 74 6 G 74 6 G 74 6 G 73 7 G 74 6 G 74 7 6 G 74 7 6 G 74 8 2 98 7 6 G 74 8 0	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOA P190VENFAN MOH MOV MIH MIV EOA 502SPNBLWR S02 EOA 502SPNBLWR MOH MOV MIV CLNESNCBLW	-	COOLJ P 19 502 S C LIN	OV SPE	FAN A EN FAN NCER B	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137 R BLOWER OVERA .085 .555	LL LEVEI In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G G G G G G G G G G G G G G	KHZ
COOLFAN A MOH MOV MIH MIV MIA EIH EIV EIA EOH EOV EOA P190VENFAN MOH MOV MIH MIV EOH EOV EOA 502SPNBLWR MOH MOV MIV CLNESNCBLW	-	COOLJ P 19 502 S C LIN	OV OV	FAN A EN FAN NCER Bi	OVERA .129 .287 .116 .295 .269 .121 .116 .140 .109 .124 .105 OVERA .275 .178 .295 .555 .168 .473 .137 LOWER OVERA .109 .174 .137 R BLOWER OVERA .055 .055	LL LEVEI In/Sec	(02-May- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	22) 62 G 71 G G G G G G G G G G G G G G	KHZ S S S K K K S K K S K K S K K K S K K S K K S K S K S K S K S K S K S S K S S K S S S S S S S S S S S S S

DLNESNCE	BLW -	D	LINE	SPENCER	BLOWER		(02-May-22)	1	
					OVERA	LL LEVEL	1 - 20) KHz	
N	10H				.305	In/Sec	.138	G-s	
N	10V				.206	In/Sec	.084	G-s	
N	1IV				.219	In/Sec	.103	G-s	
Clarificati	lon O	fν	ibrat	ion Unit	ts:				
Acc	>	G	-s	RMS					
Vel	>	I	n/Sec	PK					

As always, it has been a pleasure to serve Sonoco. If there are any comments or questions, do not hesitate to contact us.

Sincerely,

_

Kerin W. Maxuell

ISO Certified Vibration Analyst, Category III



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